#### APPENDIX H - TALL STRUCTURES ORDINANCE

### 1.1. - Purpose.

The purpose of this Ordinance shall be to preserve the County's scenic beauty, to protect sensitive environmental areas, and to safeguard the general health, safety, and welfare of the citizens of Craven County. Additionally, this Ordinance will serve to mitigate conflicts stemming from the development of Tall Structures in relation to military, civilian and commercial aircraft operations.

(Ord. of 5-6-2013)

# 1.2. - Authority.

This Ordinance establishing comprehensive regulations for Tall Structures, as defined under Section 1.19, in Craven County, North Carolina, and providing for the administration, enforcement, and amendment thereof, is adopted pursuant to the authority of North Carolina General Statute 153A-121.

(Ord. of 5-6-2013)

# 1.3. - Applicability.

This Ordinance shall apply to all of the land located within the unincorporated portions of Craven County, North Carolina, which are not located in an established municipal extraterritorial jurisdiction, as well as within the corporate boundaries and extraterritorial jurisdiction of any municipality that requests this Ordinance be effective therein, and the County so agrees. The effective date of this Ordinance is May 6, 2013. This Ordinance governs the development and use of all land and structures for Tall Structures. No Tall Structure, or land shall be used, occupied or altered therefore, and no Tall Structure, or part thereof shall be erected, constructed, reconstructed, moved, enlarged, or structurally altered, unless in conformity with all the provisions of this regulation and all other applicable regulations, except as otherwise provided by this Ordinance.

The deployment of wireless infrastructure is critical to ensuring first responders can provide for the health and safety of all residents of North Carolina and that, consistent with section 6409 of the Federal Middle Class Tax Relief and Job Creation Act of 2012, 47 USC § 1455(a), which creates a national wireless emergency communications network for use by first responders that in large measure will be dependent on facilities placed on existing wireless communications support structures, it is the policy of the State and Craven County to facilitate the placement of wireless communications support structures in all areas of the County. The placement, construction, or modification of wireless communications facilities shall be in conformity with the Federal Communications Act, 47 USC § 332 as amended, section 6409 of the Federal Middle Class Tax Relief and Job Creation Act of 2012, 47 USC § 1455(a), and in accordance with the rules promulgated by the Federal Communications Commission.

(Ord. of 5-6-2013)

## 1.4. - Location.

The proposed Tall Structure and accessory structures and equipment shall be placed in a location and in a manner that complies with the terms and conditions of this Ordinance.

### 1.5. - Approval by Craven County Board of Commissioners Required.

Approval by the Craven County Board of Commissioners of any proposed Tall Structure, and related accessory structures and equipment, must be based upon review and recommendation of the Craven County Planning Board for compliance with this Ordinance, and be based on compliance with the standards and provisions set forth in this Ordinance, as well as any comments received from representatives of MCAS Cherry Point, Seymour Johnson Air Force Base, and/or the North Carolina Utilities Commission.

(Ord. of 5-6-2013)

# 1.6. - Communication Towers Exempt from All Approval Processes.

The following are exempt from all Craven County zoning approval processes and requirements:

- Removal or replacement of transmission equipment on an existing wireless communication tower or base station that does not result in a substantial modification as defined in this Ordinance;
- (2) Ordinary maintenance of existing wireless communication towers and wireless support structures, as defined in this Ordinance;
- (3) Wireless communication facilities placed on utility poles; and
- (4) Carrier on Wheels or Cell on Wheels (COWs) placed for a period of not more than one hundred twenty (120) days at any location within Craven County or after a declaration of an emergency or a disaster by the Governor.
- (5) All minor modifications.

## 1.7. - Co-Location of Communication Towers.

Approval for a proposed Communication Tower within a radius of ten thousand (10,000) feet from an Existing Communication Tower or other similar structure shall not be issued unless the applicant certifies that the Existing Communication Tower does not meet applicant's structural specifications or technical design requirements, or that a co-location agreement could not be obtained at a reasonable market rate and in a timely manner.

### 1.8. - Height, Setbacks, and Minimum Lot Size.

Facility Type	Minimum Lot Size	Minimum Setback Requirements <sup>1</sup>	
		Setback Factor Regarding Property Lines	Maximum Height from MSL
Wind Energy Generator (Accessory)	Dictated by the Tall Structure setback requirements	1.0	100 Ft.
Wind Energy Facility	Dictated by the Tall Structure setback requirements	1 mile (5,280 Ft.)	350 Ft.
Communication Tower	Dictated by the Tall Structure setback requirements	1.0	350 Ft.

<sup>&</sup>lt;sup>1</sup> Measured from the center of the wind turbine base or communication tower to the property line.

(Ord. of 5-6-2013)

## 1.9. - Wind Energy Facility Requirements.

The following Wind Energy Facility noise, shadow flicker, ground clearance and electromagnetic interference standards apply to potential impacts associated with Wind Generators. These standards shall not apply to the installation of a Wind Energy Generator installed as an accessory use.

- (1) Audible sound from a Wind Turbine shall not exceed 35 dBA, as measured at the property line of a Non-Participating Landowner.
- (2) Shadow flicker on any existing building on a Non-Participating Landowner's property is not permitted.
- (3) Rotor blades on wind turbines must maintain at least 24 feet of clearance between their lowest point and the ground.
- (4) Wind Turbines may not interfere with normal aviation radar, radio and television reception in the vicinity. The applicant shall mitigate any interference with electromagnetic communications, such as aviation radar, radio, telephone or television signals caused by any Wind Energy Facility.
- (5) The following standards apply to all public right-of-ways:
  - Shadow flicker shall not impact public right-of-ways and/or easements where traffic volumes exceed five hundred (500) vehicles per day.

• Shadow flicker shall not impact any road intersection.

(Ord. of 5-6-2013)

1.10. - Replacement of Tall Structures, Including Communication Towers Resulting in Substantial Change.

Tall Structures that are in operation prior to May 6, 2013, can be replaced at no greater than their current height as follows:

- (1) Conforming Tall Structures may be replaced or repaired, but only if the applicant presents engineering data to the Craven County Board of Commissioners that the replacement poses no threat to the surrounding property owners or that tower replacement does not have an adverse impact on aircraft operations. Replacement of a Tall Structure exceeding the maximum height listed under Section 1.8 will require full project review as outlined under Section 1.12.
- (2) Non-conforming Tall Structures may be repaired if damaged by no more than 50 percent of the Tall Structure's fair market value, but only if the applicant presents engineering data to the Craven County Board of Commissioners that the replacement poses no threat to the surrounding property owners or that tower replacement does not have an adverse impact on aircraft operations. Repair of a Tall Structure exceeding the maximum height listed under Section 1.8 will require full project review as outlined under Section 1.12.

(Ord. of 5-6-2013)

# 1.11. - Abandoned Facilities.

Any Tall Structure that is not utilized for its permitted purpose for more than 180 days shall be considered abandoned; and once considered abandoned shall be removed by the owner within 90 days.

(Ord. of 5-6-2013)

1.12. - Permit Review and Approval Process.

All applications for Tall Structures subject to this Ordinance shall be subject to the following review and approval process unless otherwise specified:

- (1) Applications shall be submitted to Craven County Planning Staff. Applications must comply with any applicable federal, state or local statutes, ordinances, rules or regulations.
- (2) Site plan required as specified under Section 1.16.
- (3) The applicant shall provide a certified Stand-down Plan that the proposal meets the International Electrical Congress (IEC) Class S wind turbine which states that the wind turbine(s) are designed or will be designed to meet NC Building Code. A Stand-down Plan for high wind conditions shall be included, along with any other materials for the certification. (Wind energy facilities only)
- (4) Within ten days of the filing of an application hereunder, the Planning Director or his designee shall send written notice of the same to all property owners within 1 mile (5,280 feet) of the external boundary lines of the property on which the wind energy facility is proposed. All

- expenses associated with the written notice requirements shall be the responsibility of the applicant. (Wind energy facilities only)
- (5) The application will be forwarded to the Craven County Planning Board for review and approval. Prior to review by the Craven County Planning Board, the application will be forwarded to the commanders of MCAS Cherry Point and Seymour Johnson Air Force Base for review to determine if any potential adverse impacts may be associated with the proposed project.
- (6) Once review comments have been received from the representatives of MCAS Cherry Point and Seymour Johnson Air Force Base, they will be forwarded to the applicant. The applicant will have an opportunity to address any identified adverse impacts and take necessary action to mitigate issues identified through the military review process. Following receipt of the revised application, the application and all supporting documentation shall be forwarded to the Planning Board for review.
- (7) The final application will be reviewed by the Craven County Planning Board. The Planning Board will provide a recommendation for consideration by the Board of Commissioners. This recommendation shall be based on the requirements of this Ordinance, as well as comments received through the Base review process. In reviewing the application, the County may review the following:
  - (a) Applicable public safety, land use, or zoning issues addressed in its adopted regulations, including aesthetics, landscaping, land-use based location priorities, structural design, setbacks, and fall zones.
  - (b) Information or materials directly related to an identified public safety, land development, or zoning issue including evidence that no existing or previously approved wireless support structure can reasonably be used for the wireless facility placement instead of the construction of a new wireless support structure, that residential, historic, and designated scenic areas cannot be served from outside the area, or that the proposed height of a new wireless support structure or initial wireless facility placement or a proposed height increase of a substantially modified wireless support structure, or replacement wireless support structure or collocation is necessary to provide the applicant's designed service.
  - (c) The County may require applicants for new wireless facilities to evaluate the reasonable feasibility of collocating new antennas and equipment on an existing wireless support structure or structures within the applicant's search ring. Collocation on an existing wireless support structure is not reasonably feasible if collocation is technically or commercially impractical or the owner of the existing wireless support structure is unwilling to enter into a contract for such use at fair market value. The County may require information necessary to determine whether collocation on existing wireless support structures is reasonably feasible.
- (8) A collocation or eligible facilities request application is deemed complete unless the County provides notice that the application is incomplete in writing to the applicant within 45 days of submission or within some other mutually agreed upon timeframe. The notice shall identify the deficiencies in the application which, if cured, would make the application complete. The County may deem an application incomplete if there is insufficient evidence provided to show

that the proposed collocation or eligible facilities request will comply with Federal, State, and local safety requirements. The County may not deem an application incomplete for any issue not directly related to the actual content of the application and subject matter of the collocation or eligible facilities request. An application is deemed complete on resubmission if the additional materials cure the deficiencies indicated.

- (9) The County may engage a third party consultant to review issues related to adverse impacts and/or mitigation of the same, the applicant will be required to reimburse the County for the cost thereof. Fees shall not include contingency fees or travel costs. Fees for collocation may not exceed one thousand dollars (\$1,000).
- (10) If an application is denied by the Craven County Board of Commissioners, the applicant may appeal the decision to the Superior Court of Craven County.
- (11) Approval of a Tall Structure shall be valid for a period of twenty-four (24) months from such approval. In the event that the Tall Structure is not substantially constructed for its intended purpose within such time, said approval shall be deemed automatically revoked, and of no further force or effect, without any action required by Craven County. Upon a showing of good cause, the Craven County Board of Commissioners may grant an extension hereunder, upon such terms and conditions it deems advisable, and upon payment of any additional fees that may be associated with the same.
- (12) Craven County must approve or deny any application for collocation within forty-five (45) days following application submittal or the application will be deemed approved.

(Ord. of 5-6-2013)

# 1.13. - Installation and Design.

The installation and design of all Tall Structures shall conform to the following standards:

- (1) The installation and design of the facility shall conform to applicable industry standards, including those imposed by the NC General Statutes, North Carolina Administrative Code and/or the NC Utilities Commission.
- (2) All electrical, mechanical, and building components of the facility shall be in conformance with the International Building Code with North Carolina Amendments.
- (3) Any on-site collection and distribution lines shall, to the maximum extent possible, be installed underground.
- (4) The facility shall be constructed of a corrosion resistant material that will not fade, show rust spots or otherwise change the appearance as a result of exposure to the elements, and be a non-obtrusive color such as white, off-white or gray.
- (5) The facility shall not be artificially lit, except to the extent required by the Federal Aviation Administration or other applicable authority that regulates air safety or recommended by military.
- (6) Designed to mitigate any identified adverse impacts on aircraft operations.

(Ord. of 5-6-2013)

#### 1.14. - Maintenance.

Any Tall Structure that is not functional as permitted shall be repaired or removed by the owner within six months of non-functionality. In the event that the County becomes aware of any Tall Structure that is not operated for a continuous period of six months, the County will notify the owner by certified mail and provide 30 days for a written response; provided however, in the event the owner cannot be located, then the County shall post such notice at a conspicuous place at the Tall Structure property. In its response, the owner shall set forth reasons for the operational difficulty and provide a reasonable timetable for corrective action. If the County deems the timetable for corrective action as unreasonable, the County shall notify the landowner that the Tall Structure has been deemed abandoned and such landowner shall remove the facility with 180 days of receipt of said notice. Any disturbed earth shall be graded and re-seeded, unless the landowner requests in writing that the access roads or other land surface areas not be restored.

(Ord. of 5-6-2013)

1.15. - Decommissioning and Removal of Incomplete/Abandoned Tall Structures.

When required, the following decommissioning requirements shall apply:

- (1) The applicant must remove the tall structure facility if, after the completion of the construction, the facility fails to begin operation, or becomes inoperable for a continuous period of six months.
- (2) The six month period may be extended upon a showing of good cause to the Craven County Board of Commissioners.
- (3) Any person, firm, or corporation receiving approval for an application to construct a Tall Structure Facility, excluding Communication Towers, must provide to the County a form of surety equal to 125 percent of the entire cost, as estimated by a licensed engineer under seal, and approved by the County Attorney, either through a surety performance bond, irrevocable letter of credit or other instrument readily convertible into cash at face value, either with the County or in escrow with a financial institution designated as an official depository of the County. This surety shall be retained by the County to cover the cost of removal in the event the applicant is unable to perform any required removal hereunder. Following initial submittal of the surety, the cost calculation shall be reviewed annually every 12 months, and adjusted accordingly based upon an updated estimate of a licensed engineer under seal, of the estimated removal costs. The adjustment must be approved by the Director of the Craven County Planning Department. Failure to comply with any requirement of this paragraph shall result in the immediate termination and revocation of all prior approval and permits; further, Craven County shall be entitled to make immediate demand upon, and/or retain any proceeds of, the surety, which shall be used for decommissioning and/or removal of the Tall Structure, even if still operational.

No Tall Structure shall be constructed or permitted without a set of facility plans bearing an engineer's seal that has been filed with the Craven County Planning Staff and Building Inspector and approved through the review process outlined under Section 1.12.

Tall Structure facility plans shall contain the following:

- (1) Fee. A fee determined by the County's Fee Schedule.
- (2) Narrative. A written narrative of the development plan.
- (3) Collocation on Existing Towers (communications towers only). Documentation that collocation on existing towers or structures within a radius of 10,000 feet was attempted by the applicant, but found unfeasible with reasons noted.
- (4) Collocation on proposed tower (telecommunications towers only). A notarized affidavit that states the applicant's willingness to allow location on the proposed tower, at a fair market price and in a timely manner, of any other service provided licensed by the Federal Communications Commission (FCC).
- (5) Other permits. Copies of all county, state, and federal permits with the application building permit where prior local approval is not required.
- (6) *Elevation drawings*. Elevation drawings of all towers, antennas, and accessory structures and equipment, indicating height, design, and colors.
- (7) NEPA Compliance. A copy of approved National Environmental Policy Act of 1969 (NEPA) compliance report for all towers, antennas, accessory structures, or equipment proposed for the site.
- (8) Structural Requirements. Documentation signed and sealed by a North Carolina registered engineer that indicates any proposed tower meets the structural requirements of the Standard Building Code and the collocation requirements of this article.
- (9) Other Approvals, Certifications, or Recommendations. Appropriate approvals, certifications, or recommendations required to allow review of approval criteria such as sight line analysis, aerial photographs, or other such tests as determined by the Craven County Planning Staff.
- (10) Type of Facility (wind energy facilities only). Provide the representative type and height of the wind turbine in the form of horizontal and vertical (elevation) to-scale drawings, including its generating capacity, dimensions and respective manufacturer, and a description of ancillary facilities.
- (11) Utility Commission Certification (wind energy facilities only). An applicant for a commercial wind generation facility shall state in the application whether a Certificate of Public Convenience and Necessity for the system is required from the North Carolina Utilities Commission and, if so, the anticipated schedule for obtaining the certificate. The County may ask the Utilities Commission to determine whether a Certificate of Public Convenience and Necessity is required for a particular wind power project for which the County has received an application. The County shall not approve a project requiring a certificate unless and until such certificate is issued by the Utilities Commission. If a certificate is not required from the Utilities

- Commission, the permit shall include with the application a discussion of what the applicant intends to do with the power that is generated.
- (12) Any preliminary approvals of the proposed Tall Structure received prior to the application submittal from any State or Federal agency may be submitted for County consideration with the application.

(Ord. of 5-6-2013)

### 1.17. - Liability Insurance.

- (1) The holder of a permit for a wind energy facility shall secure and maintain for the duration of the permit public liability insurance, as follows:
  - (a) Commercial general liability covering personal injuries, death and property damage. \$1,000,000.00 per occurrence \$2,000,000.00 aggregate, which shall specifically include the county and its officers, councils, employees, committee members, attorneys, agents and consultants as additional named insurance.
  - (b) Umbrella coverage \$3,000,000.00.
- (2) The insurance policies shall be issued by an agent or representative of an insurance company licensed to do business in the state and with at least a Best's rating of "A".
- (3) The insurance policies shall contain an endorsement obligating the insurance company to furnish the county with at least 30 days prior written notice in advance of a cancellation.
- (4) Renewal or replacement policies or certificates shall be delivered to the county at least 15 days before the expiration of the insurance that such policies are to renew or replace.
- (5) No more than 15 days after the grant of the permit and before construction is initiated, the permit holder shall deliver to the county a copy of each of the policies or certificates representing the insurance in the required amounts.
- (6) A certificate of insurance shall be provided to the county stating certificate is for informational purposes only and does not confer rights upon the county and shall not be deemed to comply with this Ordinance.

# 1.18. - Penalties.

Any violation of this Ordinance shall be governed by the provisions of Chapter 1 of the Craven County Code of Ordinances.

#### 1.19- Fees

Owners or operators of a wind energy facility after the effective date of this ordinance from which this chapter derives shall issue payment in full of all fees that may be required by the Craven County Schedule of fees, if any.

## 1.20. - Definitions.

Accessory Use. A use incidental to and customarily associated with the operation/maintenance of a tall structure and located on the same lot or parcel as the tall structure.

*Adverse Impact.* A negative consequence impacting the physical, social, or economic environment resulting from an action or project.

Alternative Energy Facility. A facility that uses a variety of sources and/or products for the production of power for sale as a primary use. Types of energy facilities may include, but are not limited to: petroleum; methane; ethanol; thermal; wind; solar; hydroelectric; and other energy generation facilities.

Antenna. Communications equipment that transmits, receives, or transmits and receives electromagnetic radio signals used in the provision of all types of wireless communications services.

Carrier on Wheels or Cell on Wheels (COW). A portable self-contained Wireless Communication Facility that can be moved to a location and set up to provide wireless services on a temporary or emergency basis. A COW is normally vehicle-mounted and contains a telescoping boom as the Antenna support structure.

Collocation. The placement or installation of wireless facilities on existing structures, including electrical transmission towers, water towers, buildings, and other structures capable of structurally supporting the attachment of wireless facilities in compliance with applicable building and line safety codes.

Communication Tower. Any tower or structure, natural or man-made, existing or erected, for the purpose of supporting; including, but not limited to, one or more antennas designed to transmit and/or receive television, AM/FM radio, digital, microwave, cellular, analog.

Eligible Facilities Request. A request for modification of an existing wireless tower or base station that involves collocation of new transmission equipment or replacement of transmission equipment but does not include a substantial modification.

Equipment. Antennas, transmitters, receivers, cables, wires, transformers, power supplies, electric and communication lines necessary for the provision of television broadcast signals, radio wave signals, wireless data or wireless telecommunication services to a discrete geographic area, and all other apparatuses and appurtenances, including shelters, cabinets, buildings, platforms, and ice bridges used to house or otherwise protect equipment.

Equipment Compound. An area surrounding or near the base of a wireless support structure within which a wireless facility is located.

Existing Communication Tower. Any communication tower existing or permitted in Craven County, which was placed, built, erected or permitted prior to May 6, 2013.

*Fall Zone.* The area in which a wireless support structure may be expected to fall in the event of a structural failure, as measured by engineering standards.

*Ground Area.* The area of real property surrounding the base of towers on which the equipment and appurtenances necessary for the operation and stability of the towers, including guy wires and security fencing, are constructed or installed.

*Height.* The distance measured from grade elevation above mean sea level at the time of application, to the highest point of the proposed facility while in operation.

*Non-Participating Landowner.* An owner of land, not the applicant or owner of the Tall Structure.

*North Carolina Utilities Commission.* The North Carolina Utilities Commission, or any successor state agency or department.

*Provider*. Any person that is engaged in the transmission, reception, or dissemination of television broadcast signals, radio wave signals, or electromagnetic radio signals used in the provision of wireless communications service, or the provisioning of wireless infrastructure.

Search Ring. The area within which a wireless support facility or wireless facility must be located in order to meet service objectives of the wireless service provider using the wireless facility or wireless support structure.

Setback. The required distance between the facility and the property line or right-of-way line.

*Shadow Flicker.* The visible flicker effect when rotating turbine blades cast shadows on the ground and nearby structures causing the repeating pattern of light and shadow.

Substantial Modification. The mounting of a proposed wireless facility on a wireless support structure that substantially changes the physical dimensions of the support structure. A mounting is presumed to be a substantial modification if it meets any one or more of the criteria listed below. The burden is on the County to demonstrate that a mounting that does not meet the listed criteria constitutes a substantial change to the physical dimensions of the wireless support structure.

- (1) Increasing the existing vertical height of the structure by the greater of (i) more than ten percent (10%) or (ii) the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty (20) feet.
- (2) Except where necessary to shelter the antenna from inclement weather or to connect the antenna to the tower via cable, adding an appurtenance to the body of a wireless support structure that protrudes horizontally from the edge of the wireless support structure the greater of (i) more than 20 feet or (ii) more than the width of the wireless support structure at the level of the appurtenance.
- (3) Increasing the square footage of the existing equipment compound by more than 2,500 square feet.

Tall Structures. All structures over 100 feet in height above mean sea level used for communication towers, wind energy facilities, and other similar structures used for wind energy generation, wind power, wind turbines, wireless communication facilities, or alternative energy facilities. Specifically excluded from this definition are buildings and accessory structures used primarily for residential, commercial, industrial or institutional purposes other than those contained in the preceding sentence, as well as any appurtenances related thereto.

Wind Energy Facility. An electricity-generating facility whose main purpose is to supply electricity to the electrical grid, consisting of one or more wind turbines and other accessory structures and buildings including substations, meteorological towers, electrical infrastructure, transmission lines, and other appurtenant structures and facilities, which has a rated capacity of greater than 100 kW.

Wind Energy Generator (Accessory). A single system consisting of a single wind turbine, a tower, and associated control or conversion electronics designed to supplement other electricity sources as an accessory use to existing buildings or facilities, which has a rated capacity of not more than 100 kW.

*Wind Power.* Power that is generated in the form of electricity by converting the rotation of wind turbine blades into electrical current by means of an electrical generator.

*Wind Turbine.* A wind energy conversion system that converts wind energy into electricity through the use of a wind turbine generator, and may include a nacelle, rotor, tower, and pad transformer.

Wireless Communication Facility. Any unstaffed facility for the transmission and/or reception of wireless telecommunications services, usually consisting of an antenna array, connection cables, an equipment facility, and a support structure to achieve the necessary elevation.